UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,022	02/25/2005	Hajime Seki	SEKI3006/FJD	4627

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BACON & THOMAS, PLLC
625 SLATERS LANE
FOURTH FLOOR
ALEXANDRIA, VA 22314-1176

EXAMINER
NGUYEN, THU N

ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>31 March 2009</u>.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>6-9</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>6-9</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

Claims 6-9 are pending.

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/31/2009 has been entered.

Response to Arguments

2.   Applicant's arguments filed 3/06/2009 have been fully considered but they are not persuasive because of the following reasons:

3.   Applicant argues that Cliff does not disclose "a look-ahead".

4.   In response to Applicant's argument, the Examiner submits that Clift discloses "A RAT primary array is provided that stores a mapping from the processor logical registers to registers" (Cliff: Column 2 lines 60-67 column 3 lines 1-33). The RAT stored an array or address to an RF (register file) entry. Therefore, RAT primary array is equivalent with "a look-ahead".

Claim Rejections - 35 USC § 112

5.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6.   Claim 6-9 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7.   Claim 7, 9 recited the limitation "is held/ to be held" Applicants can only choose either "is held" or "to be held" but not both. Appropriate correction is required.

Claim Rejections - 35 USC § 102

8.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section

351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9.   Claims 6-9 are rejected under 35 U.S.C. 102(b) as being anticipate by Clift et al

(U.S. Patent No 6,633,970).

10.   As per claim 6, Clift discloses a look-ahead stack management system for

configuring a look-ahead state of an operand stack in a computer system capable of out

-of-order execution, comprising:

a data storing means having entries each being able to hold data (Clift: Figure 2,

and Abstract, *register file stored data*); and

a look-ahead mapping means having entries each being able to hold an entry

address in said data storing means, wherein (Clift: Figure 2, and column 2 lines 60-67

column 3 lines 1-33, *primary array stored register files*), wherein:

each time a modification is to be made on said operand stack, said look-ahead

mapping means is so modified that, for each entry of said look-ahead mapping means

that is to hold an entry address in said data storing means allocated to an operand stack

element, the address of the entry of said look-ahead mapping means is to indicate the

number of operand stack elements over said operand stack element (Clift: Figure 2 and

column 5 lines 11-36).

As per claim 7, Clift discloses a look-ahead stack management system for configuring a

look-ahead state of an operand stack in a computer system capable of out -of-order

execution, comprising:

a data storing means having entries each being able to hold data (Clift: Figure 2,

and Abstract, *register file stored data)*; and

a look-ahead mapping means having entries each being able to hold an entry

address in said data storing means (Clift: Figure 2, and 60-67 column 3 lines 1-33,

register file stored data), wherein:

each time a modification is to be made on said operand stack, said look-ahead

mapping means is so modified that, for each entry of said look-ahead mapping means

holding an entry address in said data file allocated to an operand stack element, if the

entries of said look-ahead mapping means is to hold an entry address in said data

storing means allocated to an operand stack element, the number of operand stack

elements over the operand stack element whose value is held / to be held in the entry of

said data storing means indicated by the address held in the entry of said look-ahead

mapping means is to be unchanged (Clift: Figure 2 and column 5 lines 11-36).

As per claim 8, Clift discloses a look-ahead stack management system for configuring a

look-ahead state of an operand stack in a computer system capable of out -of-order

execution, comprising:

a data storing means having registers each being able to hold data (Clift: Figure

2, and Abstract, *register file stored data)*; and

a look-ahead mapping means having registers each being able to hold a register

number in said data file data (Clift: Figure 2, and 60-67 column 3 lines 1-33, *primary*

array stored register files), wherein:

each time a modification is to be made on said operand stack, said look-ahead

mapping means is so modified that, for each register of said look-ahead mapping

means that is to hold a register number in said data storing means allocated to an

operand stack element, the number of the register of said look-ahead mapping means is

to indicate the number of operand stack elements over said operand stack element

(Clift: Figure 2 and column 5 lines 11-36).

As per claim 9, Clift discloses a look-ahead stack management system for configuring a

look-ahead state of an operand stack in a computer system capable of out -of-order

execution, comprising:

a data storing means having registers each being able to hold data (Clift: Figure

2, and Abstract, *register file stored data)*; and

a look-ahead mapping means having registers each being able to hold a register

number in said data file (Clift: Figure 2, and 60-67 column 3 lines 1-33, *register file*

stored data), wherein:

each time a modification is to be made on said operand stack, said look-ahead

mapping means is so modified that, for each register of said look-ahead mapping

means holding a register number in said data file allocated to an operand stack

element, if the register of said look-ahead mapping means is to hold a register number

in said data storing means allocated to an operand stack element, the number of

operand stack elements over the operand stack element whose value is held / to be

held in the register of said data file indicated by the number held in the register of said

look-ahead mapping means is to be unchanged (Clift: Figure 2 and column 5 lines 11-

36).

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Thu Nga Nguyen whose telephone number is 571-270-

1765. The examiner can normally be reached on Mon-Thurs from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Apu Mofiz can be reached on 571-272-4080. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

May 7, 2009

/T. N./
Examiner, Art Unit 2161

/Apu M Mofiz/

Supervisory Patent Examiner, Art Unit 2161